(6610

CITY OF WISCONSIN DELLS

Michael T. Horkan Director of Public Works City Engineer

300 LaCrosse St. Wisconsin Dells, WI 53965 608-254-2012 FAX 608-254-7329

January 30, 2003

Jim Loock, Chief Electric Engineer **Public Service Commission** 610 N. Whitney Way P.O. Box 7854 Madison, WI 53707-7854

RE: In the Matter of Filing Plans for Appropriate Inspection and Maintenance, PSC Rule 113.0607.

Dear Mr. Loock:

Enclosed for filing are 3 copies of Wisconsin Dells Water and Light Utility's Two year Report Documenting Preventative Maintenance Plan detailing inspection maintenance schedules, condition rating criteria, corrective action schedules, record keeping procedures and report filing schedules as documented in this rule.

Very truly yours,

Michael T. Horkan

Director of Public Works/City Engineer

Whichel T. Horkon

City Of Wisconsin Dells

Enclosures Two Year Report Documenting Preventative Maintenance Plan MTH

RECEIVED

JAN 3 1 2003

Electric Division

TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

Wisconsin Dells Electric Utility

300 LaCrosse Street Wisconsin Dells,WI. 53965 608-253-2542 MHORKAN@DELLSNET.COM

January 30, 2003



This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

I Reporting Requirements: PSC 113.0607(6) states;

The Wisconsin Dells Electric Utility is providing this report to the commission showing compliance with its Preventative Maintenance Plan. The report includes a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

II Inspection Schedule and Methods:

SCHEDULE: Transmission (≥69Kv) Substations Distribution (OH & UG)	MONTHLY X	ANNUAL X X	EVERY 5 YEARS X
			Λ

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

- 1. IR infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
- 2. RFI Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
- 3. <u>SI</u> structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
- 4. Clearance refers to proper spacing of conductors from other objects, trees and conductors.
- 5. EC equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

III Condition Rating Criteria

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

- 0) Good condition
- 1) Good condition but aging
- 2) Non-critical maintenance required normally repair within 12 months
- 3) Priority maintenance required normally repair within 90 days
- 4) Urgent maintenance required report immediately to the utility and repair normally within 1 week

IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule.

V Record Keeping

Inspection forms and records will be retained for a minimum of 10 years. The inspection form contain all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

VI Reporting Requirements

This report and summary of this plan's progress is being submitted every two years with the first report due to the Commission by February 1, 2003. The report consists of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

VII Inspected Circuits and Facilities

Substation
Subst

Southwest Pool Circuit	Finnegan Ave. Sub
Hwy H to I-90	Sauk County Sub
Fitz Road	Sauk County Sub.
Grade School	Platt Sub East side

Base load and peaking generation, less than 50 megawatts per unit in size, is typically subject to pre-operational checks, in addition to checks and maintenance during and after periods of operation. No Emergency generation is available for testing or running to confirm operational readiness.

VIII Scheduling Goals Established and Success of Meeting the Criteria:

The Wisconsin Dells distribution system has three substations serving the customers with 10 circuits. Our schedule is to inspect two circuits per year, which we have been to do. The most typical items found are missing warning signs on poles and guy guards in need replacement. Our lineman takes care of these issues at the time of the inspection. Other maintenance items found to have been repaired according to their priority rating. We do have a few alleys with lines that are aged and could be rebuilt. We work on these each year according to their condition. Our inspections showed we were behind in tree trimming in some areas. A contractor was hired to help us catch up with what our crew could not get done. There were three urgent maintenance items found and all were fixed on schedule and before they caused an outage.

IX Facility condition - rating criteria:

During the past 2 years 40 % of the system was suspected and all substation inspections were completed on time. Each year we do an infrared inspection of our substations and also our main circuit feeders. This has been very helpful in finding poor connections out on the lines and we have been able to prevent what would have been significant outages. Our storm related outages were reduced in 2002, presumably a result of increased tree trimming. The distribution system is generally in good shape. Each year we try to rebuild isolated areas in need. We are also currently working with Forster Engineering to upgrade our two oldest substations.